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10/615,627	07/09/2003	Wayne A. Damrau	CPI 40043H	1469

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EXAMINER

BAREFORD, KATHERINE A

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,627

Applicant(s)

DAMRAU, WAYNE A.

Examiner

Katherine A. Bareford

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-126 is/are pending in the application.
- 4a) Of the above claim(s) 1-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 64-126 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment of July 18, 2005 has been received and entered.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 64-67, 69-73, 75-77, 79-84, 86-90, 92-101, 103, 104, 106-111, 113-117, 119-122, 124 and 126 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-7 and 9 of U.S. Patent No. 5,436,030. Although the conflicting claims are not identical, they are not patentably distinct from each other because '030 provides language that provides a teaching or suggestion of all features of the claims. For example, as to claim 64, claim 1 of '030 provides flowing the coating liquid onto the concave curved surface that curves toward the moving surface and has a terminal portion spaced from the moving surface, the

flowing on the concave curved surface to form a sheet of coating liquid and subjecting the sheet to centrifugal force to concentrate coating liquid towards one side of the sheet that is toward the concave curved surface (that is, the liquid free of air is concentrated). As to the flowing redirection and positioning of the terminal end extending towards the moving surface at the acute angle, this is provided by claims 6, 7 and 9. The other claims are similarly suggested by the language and teaching of the claims of '030.

4. Claims 64-67, 69-73, 75-77, 79-84, 86-90, 92-101, 103, 104, 106, 108-111, 113-117, 119-122, 124 and 126 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 4, 6, 9 and 12 of U.S. Patent No. 5,789,023. Although the conflicting claims are not identical, they are not patentably distinct from each other because '023 provides language that provides a teaching or suggestion of all features of the claims. For example, as to claim 64, claim 1 of '023 provides flowing the coating liquid onto the concave curved surface that curves toward the moving surface and has a terminal portion spaced from the moving surface, the flowing on the concave curved surface to form a sheet of coating liquid and subjecting the sheet to centrifugal force to concentrate coating liquid towards one side of the sheet that is toward the concave curved surface (that is, the liquid free of air is concentrated), and the direction is such that the angle of contact of the liquid with the web is acute. As to the flowing redirection and positioning of the terminal end extending towards the moving surface at the acute angle, this is provided by claim 12.

The other claims are similarly suggested by the language and teaching of the claims of '023.

5. Claims 64-67, 69-73, 75, 76, 79-84, 86-90, 92-93, 96-101, 103, 104, 107-111, 113, 115-117, 119-122, 124 and 126 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 3-7 of U.S. Patent No. 6,319,552. Although the conflicting claims are not identical, they are not patentably distinct from each other because '552 provides language that provides a teaching or suggestion of all features of the claims. For example, as to claim 64, claim 1 of '552 provides flowing the coating liquid onto the concave curved surface that curves toward the moving surface and has a terminal portion spaced from the moving surface, the flowing on the concave curved surface to form a sheet of coating liquid and subjecting the sheet to centrifugal force to concentrate coating liquid towards one side of the sheet that is toward the concave curved surface (that is, the liquid free of air is concentrated), and the direction is such that the angle of contact of the liquid with the web is acute. . As to the flowing redirection and positioning of the terminal end extending towards the moving surface at the acute angle, this is provided by claims 6 and 7. The other claims are similarly suggested by the language and teaching of the claims of '552.

6. The obvious double patenting rejections above are maintained. In the amendment of July 18, 2005, applicant provided no arguments against the double patenting rejections and instead indicated that terminal disclaimers would be filed upon a final determination of allowable claims.

Claim Objections

7. Claim 110 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 110, which depends from claim 98, has been amended to require that "the curved surface is unbounded". However, claim 98, from which claim 110 depends requires that liquid is flowed along an "elongate bounded concave curved surface"(line 3). Thus, to provide in claim 110 that the curved surface is "unbounded" contradicts the requirement of parent claim 98.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 68, 74, 78, 85, 91, 102, 105, 112, 118, 123, and 125 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant, in the July 18, 2005 amendment, amended these claims to all require the substrate to be moving at a speed “greater than about 2400 fpm”. However, this case is a continuation of 09/953,724, and thus, claims that contain material not supported by the parent case contain new matter. In this case, the parent case contains no support for “greater than about 2400 fpm”. There is also no support in the specification of the present case as to this issue. The only teaching in parent case 09/953,724 (now US 6,592,669) and the specification of the present case is that the web speed can be “2,400 – 6,000 feet per minute”. See column 8, lines 35-40 of US 6,592,669. Therefore, new matter is present in these claims.

The claims remain containing new matter, because as worded there is no upper limit to the web speed, while the previously filed case and specification provide an upper limit of 6,000 feet per minute.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claim 75 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 75, this claim now depends from claim 64, and requires that the curved surface is unbounded along an unenclosed length of "the passage". However, references to "the passage" have been deleted from claim 64, and thus "the passage" in claim 75 lacks antecedent basis.

Claims

12. The Examiner understands the term "bounded" when used in regard to the curved surface (as in claim 98, for example), to mean that the surface is enclosed as based on the described conditions in the specification, and the plain meaning of the term "bounded". If applicant disagrees, he should so state on the record. Furthermore, the Examiner further understands the term "unbounded" when used in regard to the curved surface (as in claims 75 and 110, for example) to mean that the surface is unenclosed. If applicant disagrees, he should so state on the record.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 64-66, 75, 76 and 80 are rejected under 35 U.S.C. 102(b) as being anticipated by Isayama et al (US 4299188).

Claims 64: Isayama teaches a method of coating a moving web. Column 1, lines 5-10. Liquid coating is flowed through a passage and then onto a concave curved surface that curves towards the moving web. Figure 2 and column 2, lines 10-40. The coating liquid is introduced onto the curved surface under pressure. Figures 1-2 and column 2, lines 10-40 (as discussed with regard to figure 1, coating liquid is supplied to the coating head under pressure (from the pumps) and as shown in the figure are pushed up (which would be under pressure) and onto the slide surface that has the concave curved surface, which provides introducing liquid under pressure. Furthermore, even on the slide surface, the liquids would be under, at least, atmospheric pressure and the pressure of other liquid on top). The concave surface has a terminal portion spaced from and extending towards the web in the direction of movement of the web and at an acute angle to the web. Figure 2 and column 2, lines 30-40. The coating liquid is flowed from the passage along the concave curved surface to form a sheet of coating liquid on the curved surface. Figure 2 and column 2, lines 40-60.

This subjects the sheet to centrifugal force that would concentrate coating liquid towards one side of the coating sheet that is toward the concave curved surface and redirects the coating liquid sheet for flow in the direction of movement of the moving web, and centrifugal force also moves air in the liquid to move away from the one side. Figure 2, column 2, lines 40-60, column 3, lines 15-25 and column 4, lines 5-15 (air would be entrained in the coating since the coating process is open to the air, and the radius of curvature and the velocity described is sufficient to apply centrifugal force of a magnitude to remove entrained air in the coating liquid on the side of the curved surface). The coating sheet is directed from the terminal portion towards and in the direct of movement, and at an acute angle relative the moving web to contact the moving web with the one side of the coating liquid sheet that was towards the curved surface to apply onto the moving web a layer of coating liquid. Figure 2 and column 2, lines 40-60.

Claims 65: while the side of the coating liquid sheet that was towards the curved surface contacts the web, the opposite side of the coating liquid sheet is out of substantial contact with the web. Figure 2.

Claims 66, 80: upon the coating liquid flowing from the terminal portion, coating liquid at the one side of the sheet flows substantially only towards the moving surface and is contacted with and carried away on the moving surface. Figure 2.

Claim 75: the concave curved surface is unbounded along an unenclosed length of the flow path. Figure 2.

Claims 76: the arcuate extent of the concave curved surface is about 90 degrees.

Figure 2 and column 3, lines 15-20 (semicircular).

Response to Arguments

15. Applicant's arguments filed July 18, 2005 have been fully considered but they are not persuasive.

As regards the 35 USC 102(b) rejection of claims 64-66, 75, 76 and 80 above, applicant has argued that the claims now require introducing the coating liquid under pressure onto a concave curved surface, which is not the case with Isayama, where coating flows only under the influence of gravity.

The Examiner has reviewed these arguments however, the rejection is maintained. In Isayama, the coating liquid is introduced onto the curved surface under pressure. See Figures 1-2 and column 2, lines 10-40. Isayama indicates, as discussed with regard to figure 1, that coating liquid is supplied to the coating head under pressure (from the pumps) and as shown in the figure the coating liquid is pushed up (which would be under pressure) and onto the slide surface that has the concave curved surface, which provides introducing liquid under pressure. Furthermore, even on the slide surface, the liquids would be under, at least, atmospheric pressure and the

pressure of other liquid on top, which would meet at least the minimum requirements of the claim.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine A. Bareford whose telephone number is (571) 272-1413. The examiner can normally be reached on M-F(6:00-3:30) with the First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and for After Final communications.

Other inquiries can be directed to the Tech Center 1700 telephone number at (571) 272-1700.

Furthermore, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KATHERINE BAREFORD
PRIMARY EXAMINER